

**COLORADIA PANDORA BLAKE, A MOTH OF WHICH  
THE CATERPILLAR IS USED AS FOOD BY  
MONO LAKE INDIANS.**

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In 1911 I made some fragmentary observations on this hitherto unreported Indian food, which I published the following year in the Journal of the New York Entomological Society (vol. xx, pp. 1-4, plate i). At that time I had obtained only the dried larvæ ready for cooking, and the species could not be determined. My account of the methods of the Indians in collecting and preparing this food was obtained from the clerk of the Mono Lake store, and not written down until two or three days later. No further information came to light for several years, but in 1919 I interested Mr. Roy Headley, of the Forest Service, in the matter again, and he caused some inquiries to be made in the vicinity of Mono Lake. The Indians then stated that the caterpillars occur only every alternate year, and there would be none in 1919. In 1920 Mr. Headley interested Mr. Guy S. Way, of Bishop, Cal., ranger in the Inyo Forest adjacent to Mono Lake, who took hold of the subject with enthusiasm, wrote several letters on his observations, and sent a liberal shipment of the caterpillars, which settled the identity of the species. From Mr. Way's letters I compile the following account, making a few direct quotations. It will appear at once that my earlier article contains several serious mistakes.

The Indians call this food Pe-aggie. The first step in the collection of the caterpillars is to make a trench about the base of each tree, the outer edge of the trench as nearly vertical as possible. This is to keep the caterpillars from straying away when they come down the tree. The Indians go from tree to tree in the collecting season and pick them up out of these trenches. The next process is to kill and dry them. A large mound of dry earth is made and a fire built about it. When it is thoroughly heated, the fire is removed, the mound opened, the caterpillars thrown in and mixed with the hot dirt. Here

they remain an hour, until partly cooked and dried. The Indians then sift them out of the mixture with a specially made, cone-shaped sieve, so that the insects are free from dirt. The drying is finished by spreading them on the ground in bark huts for two days, after which they are sacked and keep indefinitely in a cool, dry place. The material which I bought from a squaw at Mono Lake in 1911 is still in perfect condition; in fact, I think the odor improves with age.

This is an important food of the Indians about Mono Lake, in spite of the fact that it only lately came to the notice of the whites outside the immediate region. Mr. Way reports that Chief Jake Garrison put up a ton and a half this past summer, in the woods just south of Mono Lake. He says the caterpillars are regarded as a great delicacy, and only a few at a time are used to flavor a stew. In the case already reported by me, however, it appeared that the stew was made entirely of caterpillars; I found the larvæ tough and the stew insipid from lack of salt, the flavor resembling to my palate the taste of linseed oil. I could not from my own experience pronounce it a delicacy; however, *de gustibus non et disputandum*.

Now regarding the life history of the insect. The species is *Colorado pandora* Blake, as above indicated. It was determined by Mr. Wm. Schaus. The foodplant is *Pinus jeffreyi*. The life cycle of the moth occupies two years, and there is only one brood in the section where the observations were made. This fact has been understood by the Indians from time immemorial, so they count on putting up pe-aggies every other year.

The eggs are laid "in rough, sheltered places in the bark of the pine trees." This is about the latter part of April. On hatching somewhat later, the larvæ ascend the tree and feed on the needles during the short summer of that high altitude (about 7000 feet). By fall they are in the tops of the trees, where "they form a ball in the pine needles—a ball of pe-aggies, not a ball of pine needles, but they form this among the needles." "I have seen them thus many times in falling timber for saw-mills in early spring, in Jeffrey pine belts only."

Thus they hibernate, enduring a cold winter with considerable snow. In their second summer they grow rapidly and are through feeding by July first. Then they descend the tree-trunks, and if they escape the Indians, they scatter and

dig into the ground to pupate. We received Mr. Way's shipment on July 22nd, and several had pupated on the way; all the rest that were uninjured pupated within a day or so after being placed in rearing cages. None spun any silk whatever. Several adults came out in about two weeks after the specimens arrived, but this premature emergence was probably due to the rough usage of their long trip, which included sixty miles or more by team or auto to get to the railroad. Most of the pupæ are now dormant, and evidently will yield the adult in the spring.